

CLAIMS:

1. A packing frame structure adapted for fastening to flat material elements at four sides to hold said flat material elements a row and to protect said material elements against shocks and impact, the packing frame structure comprising:

two top rails, said top rails each comprising an elongated top wall having a first long side and a second long side, an elongated bottom wall having a first long side and a second long side, and an elongated vertical connecting wall connected between the first long side of the top wall of the respective top rail and the first long side of the bottom wall of the respective top rail, the bottom wall of each of said top rails comprising a plurality of locating holes spaced along the length thereof in a line and adapted for fastening to a respective locating hole of each of said material elements by a respective fastening device, the top wall of each of said top rails comprising a plurality of through holes spaced along the length thereof in a line for the hooking of the hook of a crane or the connection of a second packing frame structure;

two bottom rails, said bottom rails each comprising an elongated top wall having a first long side and a second long side, an elongated bottom wall having a first long side and a second long side, and an elongated connecting sidewall connected between the first long side of the top wall of the respective bottom rail and the first long side of the bottom wall of the respective bottom rail, the top wall of each of said bottom rails comprising a plurality of locating holes spaced along the length thereof in a line and adapted for fastening to a respective locating hole of each of said material elements by a respective

fastening device, the bottom wall of each of said bottom rails comprising a plurality of through holes spaced along the length thereof in a line; and

5 two narrow elongated blocks adapted for attaching to the bottom walls of said bottom rails and fixedly fastened to the through holes of the bottom walls of said bottom rails by respective fastening devices to support said bottom rails above a flat surface for enabling the packing frame structure with said material elements to be carried by
10 a forklift.

2. The packing frame structure as claimed in claim 1, wherein
said top rails each further comprise an elongated sidewall
perpendicularly downwardly extended along the second long side of the
15 respective bottom wall in direction reversed to the respective elongated
connecting wall, the sidewall of each of said top rails having a plurality
of locating holes longitudinally spaced in a line and adapted for
fastening to a respective top locating hole in one side flange of each of
said material elements by a respective fastening device; said bottom
20 rails each further comprise an elongated sidewall perpendicularly
upwardly extended along the second long side of the respective top
wall in direction reversed to the respective elongated connecting wall,
the sidewall of each of said bottom rails having a plurality of locating
holes longitudinally spaced in a line and adapted for fastening to a
25 respective bottom locating hole in one side flange of each of said
material elements by a respective fastening device.

3. The packing frame structure as claimed in claim 1, wherein
the bottom wall of each of said top rails comprises a plurality of
30 downward lugs spaced along the length thereof and aligned in a line,

said downward lugs each having a locating hole for fastening to a respective locating hole of each of said material elements by respective fastening device; the top wall of each of said bottom rails comprises a plurality of upright lugs spaced along the length thereof and aligned in

5 a line, said upright lugs having a locating hole for fastening to a respective locating hole of each of said material elements by a respective fastening device.